



# **STIC Search Report**

## **Biotech-Chem Library**

**STIC Database Tracking Number: 160941**

**TO: Jana Hines**  
**Location: rem/3b29/3c18**  
**Art Unit: 1645**  
**Tuesday, April 19, 2005**

**Case Serial Number: 10/873768**

**From: Edward Hart**  
**Location: Biotech-Chem Library**  
**REM-1A55**  
**Phone: 571-272-2512**

**edward.hart@uspto.gov**

### **Search Notes**

Examiner Hines,

Here are the results of the search you requested.

Please feel free to contact me if you have any questions.

Edward Hart

STIC-Biotech/ChemLib

CRFE

158941

nej

From: Hines, Ja-Na  
Sent: Monday, April 18, 2005 1:03 PM  
To: STIC-Biotech/ChemLib  
Subject: Sequence Request

Good Afternoon,

I would like to request a sequence search for case 10/873,768. The sequence may be found in related case 09/709,201. I would like to request that SEQ ID NO:101 be searched. I would also like to request an inventor search. The inventors are William M. Mitchell and Charles W. Stratton. Thanks so much!!!

Ja-Na Hines (76048)  
Office: Rem 3B29  
Mailbox: Rem 3C18  
571-272-0859  
AU: 1645

seq 101-13AA

RECEIVED  
APR 18 2005  
(STIC)

\*\*\*\*\*

STAFF USE ONLY

Searcher: \_\_\_\_\_  
Searcher Phone: 2- \_\_\_\_\_  
Date Searcher Picked up: 5/19/05  
Date Completed: \_\_\_\_\_  
Searcher Prep/Rev. Time: \_\_\_\_\_  
Online Time: \_\_\_\_\_

\*\*\*\*\*

Type of Search

NA#: \_\_\_\_\_ AA#: 1  
Interference: \_\_\_\_\_ SPDI: \_\_\_\_\_  
S/L: \_\_\_\_\_ Oligomer: \_\_\_\_\_  
Encode/Transl: \_\_\_\_\_  
Structure#: \_\_\_\_\_ Text: \_\_\_\_\_  
Inventor: \_\_\_\_\_ Litigation: \_\_\_\_\_

\*\*\*\*\*

Vendors and cost where applicable

STN: \_\_\_\_\_  
DIALOG: \_\_\_\_\_  
QUESTEL/ORBIT: \_\_\_\_\_  
LEXIS/NEXIS: \_\_\_\_\_  
SEQUENCE SYSTEM: \_\_\_\_\_  
WWW/Internet: \_\_\_\_\_  
Other(Specify): \_\_\_\_\_

=> file hcaplus

FILE 'HCAPLUS' ENTERED AT 09:00:05 ON 19 APR 2005

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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE COVERS 1907 - 19 Apr 2005 VOL 142 ISS 17

FILE LAST UPDATED: 18 Apr 2005 (20050418/ED)

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=> d his

(FILE 'HOME' ENTERED AT 08:56:10 ON 19 APR 2005)  
SET COST OFF

FILE 'HCAPLUS' ENTERED AT 08:56:21 ON 19 APR 2005

E MITCHELL W/AU  
L1 150 S E3,E23-E24,E92,E94,E95  
E STRATTON C/AU  
L2 66 S E3,E10,E15  
L3 10 L1 AND L2

FILE 'HCAPLUS' ENTERED AT 09:00:05 ON 19 APR 2005

=> d ibib abs 13 tot

L3 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:240412 HCAPLUS

DOCUMENT NUMBER: 140:247093

TITLE: Methods using antichlamydial agents and agents increasing inducible nitric oxide synthase (iNOS) activity in the treatment of multiple sclerosis

INVENTOR(S): **Stratton, Charles W.; Mitchell, William M.**; Sriram, Subramaniam

PATENT ASSIGNEE(S): Vanderbilt University, USA

SOURCE: U.S., 42 pp., Cont.-in-part of U.S. 6,579,854.  
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 6710033	B1	20040323	US 2000-528348	20000317
US 2002009802	A1	20020124	US 1998-25174	19980218
US 6562582	B2	20030513		
US 6579854	B1	20030617	US 1998-73661	19980506
WO 2000057187	A2	20000928	WO 2000-US7226	20000317
WO 2000057187	A3	20010419		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2003223959	A1	20031204	US 2003-419034	20030417
US 2005042690	A1	20050224	US 2004-873768	20040622

PRIORITY APPLN. INFO.:  
 US 1996-23921P P 19960814  
 US 1997-911593 A2 19970814  
 US 1998-25174 A2 19980218  
 US 1998-73661 A2 19980506  
 US 1999-125598P P 19990319  
 US 2000-176662P P 20000118  
 US 2000-176784P P 20000118  
 US 2000-176940P P 20000118  
 US 1997-45689P P 19970506  
 US 1997-45739P P 19970506  
 US 1997-45779P P 19970506  
 US 1997-45780P P 19970506  
 US 1997-45787P P 19970506  
 US 1998-25176 A2 19980218  
 US 1998-25521 B2 19980218  
 US 2000-528348 A 20000317  
 US 2000-709201 A1 20001108

AB The invention features methods and reagents for the diagnosis, monitoring, and treatment of multiple sclerosis. The invention is based in part on the discovery that Chlamydia is present in patients with multiple sclerosis, and that antichlamydial agents improve or sustain neurol. function in these patients. The methodol. of the invention also uses an agent that increases iNOS activity.

REFERENCE COUNT: 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:466677 HCAPLUS

DOCUMENT NUMBER: 139:47120

TITLE: Diagnosis and management of infection caused by Chlamydia

INVENTOR(S): Mitchell, William M.; Stratton, Charles W.

PATENT ASSIGNEE(S): Vanderbilt University, USA

SOURCE: U.S., 74 pp., Cont.-in-part of U.S. Ser. No. 25,521, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6579854	B1	20030617	US 1998-73661	19980506
US 2001002421	A1	20010531	US 1998-25176	19980218
US 6258532	B2	20010710		
US 2002009802	A1	20020124	US 1998-25174	19980218
US 6562582	B2	20030513		
ZA 9803798	A	20000307	ZA 1998-3798	19980506
US 6710033	B1	20040323	US 2000-528348	20000317
US 6838552	B1	20050104	US 2000-709201	20001108
US 2003171348	A1	20030911	US 2002-100785	20020319
US 6664239	B2	20031216		
US 2003195184	A1	20031016	US 2002-101279	20020319
US 6756369	B2	20040629		
US 2003223959	A1	20031204	US 2003-419034	20030417
US 2005042690	A1	20050224	US 2004-873768	20040622

## PRIORITY APPLN. INFO.:

US 1996-23921P	P	19960814
US 1997-45689P	P	19970506
US 1997-45739P	P	19970506
US 1997-45779P	P	19970506
US 1997-45780P	P	19970506
US 1997-45787P	P	19970506
US 1997-911593	B2	19970814
US 1998-25174	A2	19980218
US 1998-25176	A2	19980218
US 1998-25521	B2	19980218
US 1997-45784P	P	19970506
US 1998-73661	A2	19980506
US 1999-125598P	P	19990319
US 2000-176662P	P	20000118
US 2000-176784P	P	20000118
US 2000-176940P	P	20000118
US 2000-528348	A1	20000317
US 2000-709201	A1	20001108

AB The present invention provides a unique approach for the diagnosis and management of infections by Chlamydia species, particularly *C. pneumoniae*. The invention is based, in part, upon the discovery that a combination of agents directed toward the various stages of the chlamydial life cycle is effective in substantially reducing infection. Products comprising combination of antichlamydial agents, novel compns. and pharmaceutical packs are also described. The invention further relates to various methods of identifying cells containing a cryptic form of a Chlamydia species. Specifically, primers and probes targeted to *C. pneumoniae* cysteine-rich major outer membrane protein (MOMP) gene are used in the susceptibility test for detecting the presence or absence of chlamydial DNA, especially in cryptic forms and/or elementary bodies, which are viable, yet are not replicating. In addition, various immunoassays targeted to MOMP are also provided. The susceptibility of cryptic *C. pneumoniae* to various antibiotics or their combinations is also studied in great details in cultured cells and infected mice. The invention also pertains to a method for detecting chlamydial porphyria caused by Chlamydia species in patients.

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:65982 HCAPLUS

DOCUMENT NUMBER: 136:133602

TITLE: Identification of antigenic peptide sequences

INVENTOR(S): **Mitchell, William M.; Stratton, Charles W.**  
 PATENT ASSIGNEE(S): **Vanderbilt University, USA**  
 SOURCE: **U.S., 40 pp., Cont.-in-part of U.S. Ser. No. 911,593, abandoned.**  
 CODEN: **USXXAM**  
 DOCUMENT TYPE: **Patent**  
 LANGUAGE: **English**  
 FAMILY ACC. NUM. COUNT: **7**  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6340463	B1	20020122	US 1998-25596	19980218
US 2003175310	A1	20030918	US 2001-20269	20011214
US 2005042690	A1	20050224	US 2004-873768	20040622
PRIORITY APPLN. INFO.:			US 1996-23921P	P 19960814
			US 1997-911593	B2 19970814
			US 1998-25521	B1 19980218
			US 1998-25596	A1 19980218
			US 2000-709201	A1 20001108

AB Identification of linear amino acid antigenic sequences for the production of both polyclonal and monoclonal antibodies to defined antigenic domains is described. Also described are antigenic peptides identified by the described methods and antibodies thereto.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:402689 HCAPLUS

DOCUMENT NUMBER: 136:100943

TITLE: CSF oligoclonal bands in MS include antibodies against Chlamydophila antigens

AUTHOR(S): Yao, Song-Yi; **Stratton, Charles W.; Mitchell, William M.; Sriram, Subramaniam**

CORPORATE SOURCE: Departments of Neurology, Vanderbilt University School of Medicine, Nashville, TN, 37212, USA

SOURCE: Neurology (2001), 56(9), 1168-1176

CODEN: NEURAI; ISSN: 0028-3878

PUBLISHER: Lippincott Williams & Wilkins

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Background: Considerable evidence suggests the role of an infectious agent in MS. The presence of Chlamydophila pneumoniae in CSF from patients with MS was shown earlier; to further examine this association the reactivity of the oligoclonal antibody response in the CSF of patients with MS to C pneumoniae antigens was determined and compared with other antigens. Methods: Seventeen patients with MS and 14 control subjects with other neurol. disease were studied. Affinity-driven immunoblot studies and solid-phase adsorption of CSF oligoclonal bands by elementary body antigens of C pneumoniae, viral antigens (measles and herpes simplex virus-1), bacterial antigen (Escherichia coli and Staphylococcus aureus), and heat shock protein-60 were performed. Results: Affinity-driven immunoblot studies demonstrated reactivity of oligoclonal bands in CSF samples from 16 patients with MS against elementary body antigens of C pneumoniae. None of the control subjects showed a prominent reactivity to elementary body antigens of C pneumoniae. In 14 of 17 patients with MS examined, oligoclonal bands were adsorbed either partially or completely from the CSF by elementary body antigens of C pneumoniae, but not by myelin basic

protein, heat shock protein-60, or bacterial or viral antigens. In three patients with subacute sclerosing panencephalitis, adsorption of oligoclonal bands was seen with measles virus antigens but not with elementary body antigens of *C. pneumoniae*. Conclusions: Oligoclonal bands in CSF of patients with MS include antibodies against *Chlamydia* antigens.

REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:397834 HCAPLUS

DOCUMENT NUMBER: 135:2559

TITLE: Methods for in vitro susceptibility testing of *Chlamydia*

INVENTOR(S): Stratton, Charles W.; Mitchell, William M.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 9 pp., Cont.-in-part of U.S. Ser. No. 911,593, abandoned.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2001002421	A1	20010531	US 1998-25176	19980218
US 6258532	B2	20010710		
CA 2289228	AA	19981112	CA 1998-2289228	19980506
WO 9850074	A2	19981112	WO 1998-US9237	19980506
WO 9850074	A3	19990819		
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9872899	A1	19981127	AU 1998-72899	19980506
AU 746381	B2	20020418		
EP 981372	A2	20000301	EP 1998-920292	19980506
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002512622	T2	20020423	JP 1998-548440	19980506
US 6579854	B1	20030617	US 1998-73661	19980506
US 2003195184	A1	20031016	US 2002-101279	20020319
US 6756369	B2	20040629		
US 2005042690	A1	20050224	US 2004-873768	20040622
PRIORITY APPLN. INFO.:			US 1997-911593	B2 19970814
			US 1996-23921P	P 19960814
			US 1997-45689P	P 19970506
			US 1997-45739P	P 19970506
			US 1997-45779P	P 19970506
			US 1997-45780P	P 19970506
			US 1997-45784P	P 19970506
			US 1997-45787P	P 19970506
			US 1998-25174	A 19980218

US 1998-25176	A 19980218
US 1998-25521	A 19980218
US 1998-73661	A1 19980506
WO 1998-US9237	W 19980506
US 2000-709201	A1 20001108

AB Methods for determining the susceptibility of intracellular pathogens, particularly Chlamydia, to single or combination of test agents are described. The methods can be used for in vitro or in vivo evaluation of agents that can be used as therapeutic agents in the treatment/eradication of pathogen infection in general or to target a specific infected organ. Assays which utilize nucleic amplification techniques (e.g., PCR) to determine effectiveness of the agent(s) evaluated are also described.

L3 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:262877 HCAPLUS

DOCUMENT NUMBER: 135:32584

TITLE: Regulation by IFN- $\beta$  of inducible nitric oxide synthase and interleukin-12/p40 in murine macrophages cultured in the presence of Chlamydia pneumoniae antigens

AUTHOR(S): Yao, Song-Yi; Ljunggren-Rose, Asa; **Stratton, Charles W.; Mitchell, William M.**; Sriram, Subramaniam

CORPORATE SOURCE: Department of Neurology, Vanderbilt University School of Medicine, Nashville, TN, 37212, USA

SOURCE: Journal of Interferon and Cytokine Research (2001), 21(3), 137-146

CODEN: JICRFJ; ISSN: 1079-9907

PUBLISHER: Mary Ann Liebert, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Chlamydia pneumoniae has been demonstrated in the cerebrospinal fluid (CSF) of patients with multiple sclerosis (MS). Interferon- $\beta$  (IFN- $\beta$ ) has favorable effects on the clin. course of MS. We investigated whether the beneficial effects of IFN- $\beta$  in MS may involve its role in regulating nitric oxide (NO) and interleukin-12 (IL-12) in macrophages, as these immune modulators form part of the innate immune response to intracellular pathogens, such as C. pneumoniae. Murine macrophages in cultures exposed to elementary body antigens or recombinant major outer membrane protein (rMOMP) of C. pneumoniae demonstrate a significant increase in NO as well as production of IL-12/p40 in culture supernatants compared with basal levels. Addition of murine IFN- $\beta$  increased NO activity in murine macrophages cultured with chlamydial antigens. Addition of neutralizing anti-IFN- $\beta$  antibody prevented the NO increase. In contrast to its effect on inducible NO synthase (iNOS), IFN- $\beta$  reduced induction of IL-12/p40 following culture with either elementary body antigens or rMOMP. Inhibition was reversed with anti-IFN- $\beta$  antibody. If C. pneumoniae infection is responsible for the inflammatory response in the pathogenesis of MS, the beneficial effects of IFN- $\beta$  in MS may be due to its enhancing intracellular NO activity while inhibiting secretion of the proinflammatory cytokine, IL-12.

REFERENCE COUNT: 67 THERE ARE 67 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:688466 HCAPLUS

DOCUMENT NUMBER: 133:249334

TITLE: Methods and reagents for the diagnosis and treatment



INVENTOR(S): of multiple sclerosis caused by Chlamydia  
**Stratton, Charles W.; Mitchell, William M.**; Yao, Song-yi; Bannan, Jason D.;  
 Ljunggren-Rose, Asa; Sriram, Subramaniam  
 PATENT ASSIGNEE(S): Vanderbilt University, USA  
 SOURCE: PCT Int. Appl., 102 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 7  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000057187	A2	20000928	WO 2000-US7226	20000317
WO 2000057187	A3	20010419		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1166117	A2	20020102	EP 2000-916513	20000317
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6710033	B1	20040323	US 2000-528348	20000317
PRIORITY APPLN. INFO.:				
			US 1999-125598P	P 19990319
			US 2000-176662P	P 20000118
			US 2000-176784P	P 20000118
			US 2000-176940P	P 20000118
			US 2000-528348	A 20000317
			US 1996-23921P	P 19960814
			US 1997-911593	A2 19970814
			US 1998-25174	A2 19980218
			US 1998-73661	A2 19980506
			WO 2000-US7226	W 20000317
AB The invention features methods and reagents for the diagnosis, monitoring, and treatment of multiple sclerosis. The invention is based in part on the discovery that Chlamydia is present in patients with multiple sclerosis, and that anti-chlamydial agents improve or sustain neurol. function in these patients.				
L3 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN				
ACCESSION NUMBER: 1999:479177 HCAPLUS				
DOCUMENT NUMBER: 131:270389				
TITLE: Chlamydia pneumoniae infection of the central nervous system in multiple sclerosis				
AUTHOR(S): Sriram, Subramaniam; <b>Stratton, Charles W.</b> ; Yao, Song-yi; Tharp, Anthony; Ding, Lingmei; Bannan, Jason D.; <b>Mitchell, William M.</b>				
CORPORATE SOURCE: Departments of Neurology, Vanderbilt School of Medicine, Nashville, TN, 37212, USA				
SOURCE: Annals of Neurology (1999), 46(1), 6-14				
CODEN: ANNED3; ISSN: 0364-5134				
PUBLISHER: Lippincott Williams & Wilkins				
DOCUMENT TYPE: Journal				

LANGUAGE: English

AB Our identification of Chlamydia pneumoniae in the cerebrospinal fluid (CSF) of a patient with multiple sclerosis (MS) led us to examine the incidence of this organism in the CSF from 17 patients with relapsing-remitting MS, 20 patients with progressive MS, and 27 patients with other neurol. diseases (OND). CSF samples were examined for C pneumoniae by culture, polymerase chain reaction assays, and CSF Ig (Ig) reactivity with C pneumoniae elementary body antigens. C pneumoniae was isolated from CSF in 64% of MS patients vs. 11% of OND controls. Polymerase chain reaction assays demonstrated the presence of C pneumoniae MOMP gene in the CSF of 97% of MS patients vs. 18% of OND controls. Finally, 86% of MS patients had increased CSF antibodies to C pneumoniae elementary body antigens as shown by ELISA absorbance values that were 3 SD greater than those seen in OND controls. The specificity of this antibody response was confirmed by western blot assays of the CSF, using elementary body antigens. Moreover, CSF isoelec. focusing followed by western blot assays revealed cationic antibodies against C pneumoniae. Infection of the central nervous system with C pneumoniae is a frequent occurrence in MS patients. Although the organism could represent the pathogenetic agent of MS, it may simply represent a secondary infection of damaged central nervous system tissue. A therapeutic trial directed at eliminating C pneumoniae from the central nervous system may provide addnl. information on its role in MS.

REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:752291 HCAPLUS

DOCUMENT NUMBER: 130:10609

TITLE: Diagnosis and management of infection caused by Chlamydia

INVENTOR(S): Mitchell, William M.; Stratton, Charles W.

PATENT ASSIGNEE(S): Vanderbilt University, USA

SOURCE: PCT Int. Appl., 139 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9850074	A2	19981112	WO 1998-US9237	19980506
WO 9850074	A3	19990819		
W:	AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
US 2001002421	A1	20010531	US 1998-25176	19980218
US 6258532	B2	20010710		
CA 2289228	AA	19981112	CA 1998-2289228	19980506
AU 9872899	A1	19981127	AU 1998-72899	19980506
AU 746381	B2	20020418		
EP 981372	A2	20000301	EP 1998-920292	19980506

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, FI

ZA 9803798	A	20000307	ZA 1998-3798	19980506
JP 2002512622	T2	20020423	JP 1998-548440	19980506
US 6838552	B1	20050104	US 2000-709201	20001108
US 2005042690	A1	20050224	US 2004-873768	20040622
PRIORITY APPLN. INFO.:			US 1997-45689P	P 19970506
			US 1997-45739P	P 19970506
			US 1997-45779P	P 19970506
			US 1997-45780P	P 19970506
			US 1997-45784P	P 19970506
			US 1997-45787P	P 19970506
			US 1997-911593	A 19970814
			US 1998-25176	A2 19980218
			US 1998-25521	A2 19980218
			US 1996-23921P	P 19960814
			US 1998-25174	A 19980218
			WO 1998-US9237	W 19980506
			US 2000-709201	A1 20001108

AB A combination of agents directed toward various stages of the chlamydial life cycle is effective in substantially reducing infection. These include agents targeted against the cryptic phase (e.g. nitroarom. compds.), elementary body phase (e.g. disulfide reducing agents), and replicating phase, probenecid, and antiporphyrin agents. Chlamydia-free cell lines and animals can be obtained, and Chlamydia infections can be treated, by use of  $\geq 2$  such agents. Chlamydia infections may be diagnosed or monitored by immunoassays (e.g. ELISA or antigen capture assay) for the cysteine-rich major outer membrane protein or for specific antigenic peptides, DNA amplification assays (e.g. PCR) for chlamydial genes, and Western blot assays. Thus, a multiple sclerosis patient showing progressive limb impairment was diagnosed with *C. pneumoniae* infection by cerebrospinal fluid PCR and culture; treatment with rifampin (300 mg twice a day for 2 mo against the elementary body/reticulate body transition), flagyl (500 mg twice a day for 5 mo against the stationary phase reticulate body), and ofloxacin (for 2 mo) and Bactrim (double strength twice a day) and levaquin (500 mg/day) for 5 mo against the replicating reticulate body resulted in marked improvement in all aspects of neurol. function and an ability to return to work and routine athletic activities.

L3 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN

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TITLE: Compositions of antichlamydial agents for the diagnosis and management of infection caused by chlamydia

INVENTOR(S): Mitchell, William M.; Stratton, Charles W.

PATENT ASSIGNEE(S): Vanderbilt University, USA; Mitchell, William M.; Stratton, Charles W.

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WO 9806435	A2	19980219	WO 1997-US14402	19970814
WO 9806435	A3	19980409		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,				
DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ,				
LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL,				
PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US,				
UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR,				
GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,				
GN, ML, MR, NE, SN, TD, TG				
AU 9741516	A1	19980306	AU 1997-41516	19970814
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PRIORITY APPLN. INFO.:			US 1996-23921P	P 19960814
			US 1997-911593	B2 19970814
			WO 1997-US14402	W 19970814
			US 1998-25521	B1 19980218
			US 2000-709201	A1 20001108

AB The invention provides a unique approach for the diagnosis and management of infections by Chlamydia species, particularly C. pneumoniae. The invention is based, in part, on the discovery that a combination of agents directed toward the various stages of the chlamydial life cycle is effective in substantially reducing infection. Products comprising combination of antichlamydial agents, compns., and pharmaceutical packs are also described.